

CURRENT LITERATURE.

The Flora of Nebraska.¹

The members of the botanical seminar of the University of Nebraska have undertaken not only a botanical survey of the state, but have begun the publication of a flora on an elaborate and costly plan. The first two parts of the twenty-five promised have recently been issued and are an earnest of a most admirable work. The brief introduction prepared by Dr. C. E. Bessey (who, we doubt not, is the inspiration of the undertaking) gives an account of the principles of classification of the vegetable kingdom. The first part, embracing sixty-eight pages and twenty-two plates has been prepared chiefly by Mr. De Alton Saunders, who describes the green plants belonging to the Protophyta and Phycophyta; while Messrs. Roscoe Pound and Frederick R. Clements describe the fungi of these groups. The second part, on the Coleochaetaceæ and Characeæ, has been done by Mr. Albert F. Woods, and consists of nine pages of text with fourteen plates.

Of the accuracy of this work only a specialist can judge and we do not undertake to pronounce upon it; but however many slips there may be, or however crude the critical work may be, it can hardly be doubted that the publication will be of great value in making known the flora of the state not only to those outside it but much more to those inside it. That it begins with the plants it does (or even treats them at all) will be a revelation to many a teacher, who thinks of these as plants to be sure, but hardly as plants which can be described, much less identified, by ordinary mortals.

A word of commendation should be said for the plates. The drawing, engraving and printing are all excellent and they contribute much to the value of the work. Not all the species are represented of course. No principle of selection is stated and we are unable to discover what it is beyond that of figuring at least one species of each genus. So many of the species are thus shown that the plates add immensely to the helpfulness of the text.

Nebraska is in peculiar need of a local flora, since it lies at the junction of the Rocky Mountain and prairie region, and even the published

¹Flora of Nebraska. Edited by the members of the botanical seminar of the University of Nebraska. 4to. Introduction, by Charles E. Bessey. Part 1, Protophyta-Phycophyta, by De Alton Saunders, pp. 1-68. pl. 1-22. Part 2, Coleochaetaceæ, Characeæ, by Albert F. Woods, pp. 119-128. pl. 23-36. Lincoln, Neb. Published by the Seminar. 1894. Per part, \$1.00.

floras of the spermaphytes do not adequately cover its territory, to say nothing of the entire lack of manuals for the lower plants.

We congratulate the people of Nebraska therefore, on the auspicious beginning of this work. We commend the disinterested labors of the botanical seminar to public support by the appropriation of public moneys for maintenance and extension of the botanical survey. No state, so far as we are aware, has ever had such work done at private cost, and we doubt not that a small appropriation would not only greatly encourage these unselfish students of the Nebraska flora, but greatly facilitate and extend their work.

Minor Notices.

PROF. W. W. BAILEY'S Botanical Note Book will surely be welcomed by those who intend giving a course of lectures on structural and systematic botany in relation to the phanerogams, and conducting classes in laboratory work in the same subject. The book is divided into two parts. The first part consisting of outlines of lectures on the seed, root, stem, leaves, inflorescence, flower, essential organs, and fruit. Each lecture is followed by a schedule for the description of the parts treated in the lecture.

The schedules consist of questions, and lines of investigation to be followed by the student. Part two is devoted to lectures upon certain difficult families or genera with schedules for their study. These are arranged in the same general way as the preceding, and include Compositæ, Umbelliferæ, Cruciferæ, Gramineæ and Ferns (with the genera *Carex* and *Cyperus*.) The framework of an introductory lecture on the subject of botany in general precedes the whole. The book is of handy size, $6\frac{3}{4}$ by $4\frac{1}{2}$ in, and is bound in strong flexible covers. It will be a welcome addition to the laboratory, and a practical help to the instructor. — WALTER DEANE.

THE PROCEEDINGS of the Indiana Academy of Science for 1893 contain much botanical material, chiefly in connection with the work of the State Biological Survey. Professor Underwood, the botanical director of the survey, gives an account of the work, followed by a complete bibliography of Indiana botany, a list of cryptogams at present known to inhabit the state of Indiana (about 650), containing descriptions of some new species, and complete lists of hosts in the case of parasites. Among the botanical papers published in full are a general consideration of the phanerogamic flora of the state, by Stanley Coul-

¹BAILEY, W. W.—Botanical Note Book. A synopsis of lectures and laboratory plans for use in Brown University and University Extension classes. Providence, R. I. Preston and Rounds, 1894.

ter; the special senses of plants, a presidential address by Dr. J. C. Arthur; notes on *Saprolegnia ferox*, by Geo. L. Roberts; the ash of trees, by Professor M. B. Thomas; our present knowledge of the distribution of pteridophytes in Indiana, by Dr. Underwood; the adventitious plants of Fayette county, by Robert Hessler.

RACIBORSKI has studied the morphology and development of the shoots and flowers of the Cabombeæ and Nymphæaceæ. His results appear in *Flora*, 78: 244-279. 1894, and his paper has been distributed also as a separate, *repaged*. The editor of *Flora* ought not to permit this, even if the publisher knows no better than to do it. When will such bibliographical sins cease?

THE DEPARTMENT of botany of the British Museum has had prepared a "Guide" to Sowerby's models of British fungi now in the possession of the Museum. All the species are described and many figures are given. The guide forms a brief compend of the larger and more common edible and poisonous fungi of Britain.

MR. EDWARD A. BURT has worked out the histology and development of a new species of the imperfectly known phalloid genus *Anthurus*, *A. borealis* Burt. He characterizes the species, and describes his investigation in the *Memoirs* of the Boston Society of Natural History, 3: 487-505. *pl.* 49, 50. O 1894.

ANOTHER of the useful keys to Manhattan (Kans.) plants, by Professor Hitchcock, has appeared. This one is based upon fruit characters, and will be found valuable for winter study.